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MORBIDITY AND MORTALITY WEEKLY REPORT

Hepatitis B Outbreak in a State Correctional Facility, 2000

On March 31, 2000, acute hepatitis B was confirmed serologically in a 34-year-old man (index patient) who had been incarcerated for 2.5 years at a high-security state correctional facility and who presented to the facility medical unit with jaundice and abnormal liver enzymes. He reported having unprotected sex with his cellmate as his only risk factor for infection during the 6 months preceding his illness. Serologic testing of the 21-year-old cellmate confirmed that he had chronic hepatitis B virus (HBV) infection. He reported no history of symptoms compatible with hepatitis and was previously unaware of his chronic infection, but he did report having unprotected sex with the index patient and two additional inmates in the dormitory (dorm Y). On May 15, 2000, the state's department of health and department of corrections and CDC initiated an investigation to identify additional cases and determine risk factors for HBV infection. This report summarizes the results of the investigation, which identified additional cases of HBV infection in this correctional facility and underscores the need to implement hepatitis B vaccination in correctional facilities.

Current inmates who had resided in dorm Y at any time since October 1, 1999, were offered serologic testing for HBV infection and were interviewed about exposures during the preceding 6 months, including sexual activity, being tattooed, sustaining a cut or injury, being exposed to another inmate's blood, sharing a razor, and injection drug use. Acute HBV infection was defined as the presence of IgM antibody to hepatitis B core antigen (IgM anti-HBc) with or without the presence of hepatitis B surface antigen (HBsAg). Chronic HBV infection was defined as the presence of HBsAg and total (IgG and IgM) anti-HBc, and absence of IgM anti-HBc. Resolved infection was defined as the presence of total anti-HBc, but absence of IgM anti-HBc and HBsAg. Persons testing negative for anti-HBc and HBsAg were considered susceptible to HBV infection.

Of 103 eligible inmates, 97 (94%), including the sexual contacts of the inmate with chronic infection, consented to serologic testing. Of these 97 inmates, six (6%) had acute HBV infection, one (1%) had chronic infection, and 16 (16%) had resolved infection. The acute HBV infection rate among susceptible dorm Y inmates was 8%. Two inmates reported nonspecific symptoms (e.g., influenza-like illness) during the preceding 6 months. In addition to the index patient, one of the two other sexual contacts of the inmate with chronic infection had acute infection.

The six inmates with acute infection and 70 (95%) of 74 susceptible inmates were interviewed. Having sex with another man was the only risk factor associated with acute HBV infection (risk ratio=12.2; 95% confidence interval=3.5–42.2) and accounted for two of six acute infections (Table 1).

Hepatitis B Outbreak — Continued

TABLE 1. Number of inmates infected with acute hepatitis B virus who resided in a dormitory at a state correctional facility, by type of exposure, May 2000*

Exposure	No. exposed	Infected No.	Infected (%)	No. unexposed	Infected No.	Infected (%)	RR†	95% CI§
Sex with a man	3	2	(66.7)	73	4	(5.5)	12.2	(3.5–42.2)
Cut or injured	33	4	(12.1)	43	2	(4.7)	2.6	(0.5–13.3)
Exposed to blood	8	1	(12.5)	68	5	(7.4)	1.7	(0.2–12.8)
Tattooed	11	0	—	65	6	(9.2)	0.0	(0.0– 2.3)
Shared a razor	4	0	—	72	6	(8.3)	0.0	(0.0– 5.6)

* n=76.
† Relative risk.
§ Confidence interval.

The correctional facility is comprised of 14 dormitories housing 96 inmates each; it operates at 99% capacity. Inmates move within the facility to participate in daily scheduled activities and frequently move among dormitories during their incarceration. Condoms are not available to inmates. Because of the HBV transmission in dorm Y, on June 6, 2000, serologic testing was offered to inmates who resided in the remainder of the facility to determine if further HBV transmission had occurred.

Of 1247 inmates in the remainder of the facility, 1026 (82%) consented to serologic testing and completed a self-administered questionnaire, which collected information on demographic characteristics and history of behaviors or characteristics that may have placed them at risk for HBV infection both during incarceration and during their lifetime. Of the 1026 inmates, 10 (1%) had chronic HBV infection and 178 (17%) had resolved infection. Of 838 susceptible inmates, five (<1%) were identified with previously undiagnosed acute HBV infection, resulting in an acute infection rate of 0.6% among inmates who did not reside in dorm Y, and an overall infection rate of 1.2% (11 of 918). Of the inmates with acute infection who did not reside in dorm Y, two were housed in one dormitory and the remainder resided in three other dormitories. None reported risk factors for HBV infection during the preceding 6 months.

Risk behaviors were evaluated to determine the potential for susceptible inmates to acquire HBV infection. Among the 907 susceptible inmates who completed the questionnaire, 473 (52%) reported at least one exposure while incarcerated that could have resulted in HBV transmission. These included injecting drugs (21 [2%] of 902), having sex with another man (36 [4%] of 899), using a razor that had been used by another inmate (73 [8%] of 900), and receiving a tattoo (429 [48%] of 898). Lifetime histories of risk factors associated with HBV infection also were reported frequently by susceptible inmates and included having received treatment for a sexually transmitted disease (STD) (328 [37%] of 896), having had >50 female sexual partners (110 [13%] of 838), having injected drugs (78 [9%] of 899), and having had sex with men (26 [3%] of 900).

To control the outbreak, the state's department of corrections offered hepatitis B vaccination to all susceptible inmates in dorm Y. In addition, acutely and chronically infected inmates were notified of their infection status, received a clinical assessment, and postexposure prophylaxis was provided to their contacts. The state's department of health and department of corrections are collaborating to implement routine hepatitis B vaccination for all inmates in the correctional system.

Reported by: State Dept of Health; State Dept of Corrections. Epidemiology Program Office; Div of Viral Hepatitis, National Center for Infectious Diseases; Div of STD Prevention, National Center for HIV, STD, and TB Prevention; and an EIS Officer, CDC.

Hepatitis B Outbreak — Continued

Editorial Note: The findings in this report document HBV transmission in a correctional facility, including a cluster of cases of acute infection in one dormitory and additional cases distributed throughout the facility. Most persons with acute HBV infection in the correctional facility were asymptomatic, and serologic surveys were needed to determine the extent of HBV transmission. The overall infection rate of 1% reflected infections acquired during the preceding 6 months and was higher than the estimated incidence of 1% per year in previous studies (*1,2*). This serologic survey also indicated that 1% of inmates had chronic infection and that none were aware of their infection status.

HBV is transmitted primarily by percutaneous or permucosal exposures to an infected person. Risk factors associated with HBV infection include having multiple sex partners, having had an STD, being a man who has sex with men, injection drug use, and being a sexual or nonsexual household contact of a person with chronic HBV infection (*3*). Receiving a tattoo has not been associated with community acquired HBV infections among nonincarcerated populations in the United States (*4*); however, transmission could occur if the tattoo is applied using contaminated equipment.

Sex with another man accounted for only 20% of new infections in this investigation. However, this and other behaviors prohibited by the correctional facility (e.g., injecting drugs) probably are underreported by inmates. Inmates with previously unrecognized chronic HBV infection may have served as a source for infection, similar to household contacts of persons with chronic infection (*5*). Housing data were not available to determine if persons with acute HBV infection were more likely to have been a cellmate of a chronically infected inmate.

The findings in this report are consistent with previous reports of HBV transmission in prison settings (*1,2*). Since 1982, the Advisory Committee on Immunization Practices has recommended hepatitis B vaccination of long-term inmates with a history of risk factors for infection (*3*). Although a large proportion of inmates in this prison reported current or previous risk factors for HBV infection, none of the susceptible inmates had been vaccinated.

In the state correctional system in this report, approximately one third of inmates are released each year (Department of Corrections, unpublished data, 2000). Previously incarcerated persons represent a population at risk for HBV infection. Approximately 30% of persons with acute hepatitis B report a history of incarceration (*6*). Hepatitis B vaccination of prisoners would prevent ongoing HBV transmission among inmates in prison facilities and after they have been released into the community. Because of the high proportion of inmates with previous risk factors for HBV infection and the difficulty in ascertaining current risk factors, experts in correctional health recommend vaccination of all inmates (*7*).

Some states have implemented successfully routine hepatitis B vaccination of prisoners. However, identifying resources to purchase and administer vaccine remains the major barrier to national implementation of this strategy. Partnerships between state health and corrections departments can help to implement hepatitis B vaccination and promote effective strategies for prevention of other STDs and infections in correctional facilities (*8*).

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Hepatitis B Outbreak — Continued

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Influenza and Pneumococcal Vaccination Levels Among Persons Aged ≥65 Years — United States, 1999

Annual influenza epidemics have resulted in an average of >18,000 deaths and 48,000 pneumonia and influenza hospitalizations among older persons in the United States (*1*). In 1998, an estimated 3400 older persons died from bacteremic pneumococcal pneumonia, a common complication of influenza, or from other forms of invasive pneumococcal disease (*2*). A 2000 national health objective included increasing influenza and pneumococcal vaccination levels to ≥60% among noninstitutionalized, high-risk persons, including those aged ≥65 years (*3*). To assess progress toward this objective, data were analyzed from the 1999 Behavioral Risk Factor Surveillance System (BRFSS) for persons aged ≥65 years. This report summarizes the results of that analysis, which indicated that prevalence of influenza vaccination during the 1998–99 influenza season exceeded the objective nationally and in 48 of 52 reporting areas; however, influenza vaccination levels may have reached a plateau. Prevalence among older persons who had ever received pneumococcal vaccination exceeded the national objective in only eight states. To reach the 2010 national objective of ≥90% influenza and pneumococcal vaccination among this population, new strategies and additional resources to implement adult vaccination activities may be needed.

BRFSS is an ongoing, state-based, random-digit–dialed telephone survey of noninstitutionalized civilian adults aged ≥18 years. Questions about having received an influenza vaccination ("During the past 12 months, have you had a flu shot?") and pneumococcal vaccination ("Have you ever had a pneumonia vaccination?") were asked in odd-numbered years starting in 1993. In 1999, 30,668 of 159,989 respondents reported they were aged ≥65 years. Respondents who reported an unknown influenza (2%) or pneumococcal (4%) vaccination status were excluded from analysis. Overall vaccination levels were estimated for the 50 states and the District of Columbia; data for Puerto Rico were reported in area-specific results only. Data were weighted by age, sex, and, in some states, by race/ethnicity, to reflect each area's estimated adult population. SUDAAN was used to calculate point estimates and 95% confidence intervals (CI), and to conduct multivariate logistic regression to calculate odds ratios (OR) and test associations of vaccination status with age, race/ethnicity, sex, education level, length of time since last check-up, self-reported health, and diabetes status.

Influenza and Pneumococcal Vaccination Levels — Continued

During 1999, 66.9% (95% CI=66.0%–67.8%) of respondents reported having received an influenza vaccination during the preceding year (Table 1), compared with 65.5% (95% CI=64.6%–66.4%) in 1997 (*4*). Estimated influenza vaccination levels exceeded 60% in 48 of 52 reporting areas; in 33 of 48, the lower limit of the 95% CI also exceeded 60% (Table 2). In three of four areas with point estimates of influenza vaccination below 60%, the 95% CI included 60%. Estimated influenza vaccination levels increased in 31 areas from 1997 to 1999, compared with increases in 48 areas from 1995 to 1997. In the 52 reporting areas, the median percentage point difference from 1997 to 1999 was 1.6 (range: –5.0–9.0), compared with a median difference of 6.0 (range: –4.1–23.2) from 1995 to 1997.

TABLE 1. Percentage of persons aged ≥65 years who reported receiving influenza or pneumococcal vaccine, by selected characteristics — Behavioral Risk Factor Surveillance System, United States, 1999

	Influenza			Pneumococcal		
Characteristic	%	(95% CI*)	% point difference 1997 to 1999	%	(95% CI)	% point difference 1997 to 1999
Age group (yrs)						
65–74	63.4	(62.2–64.6)	0.2	49.9	(48.6–51.2)	8.2†
≥75	72.5	(71.2–73.8)	3.4†	60.9	(59.4–62.2)	9.5†
Race/Ethnicity						
Non-Hispanic white	69.0	(68.0–70.0)	1.8	56.8	(55.8–57.8)	9.6†
Non-Hispanic black	48.1	(44.4–51.8)	–2.1	36.4	(32.6–40.0)	6.7
Hispanic	58.6	(52.8–64.4)	0.7	34.6	(29.2–40.0)	0.5
Other§	68.3	(61.4–75.2)	4.0	51.7	(43.8–59.6)	9.1
Sex						
Men	68.2	(66.6–69.6)	1.1	53.6	(52.0–55.2)	8.5†
Women	66.1	(65.0–67.2)	1.7	54.5	(53.4–55.8)	8.9†
Education level						
Less than high school	60.5	(58.6–62.6)	0.4	46.8	(44.8–48.8)	6.7†
High school graduate	65.9	(64.4–67.4)	1.0	53.8	(52.2–55.4)	8.8†
More than high school	71.4	(70.0–72.8)	1.9	58.8	(57.2–60.2)	9.6†
Length of time since last check-up						
1–12 months	69.9	(69.0–71.0)	1.1	57.1	(56.0–58.2)	8.8†
>1 year	48.2	(45.4–50.8)	1.0	36.3	(33.8–38.8)	7.0†
Self-reported health						
Very good or excellent	65.5	(64.0–67.0)	2.6	51.4	(49.8–53.0)	9.2†
Good	67.3	(65.8–69.0)	1.0	55.1	(53.4–56.8)	10.2†
Fair	68.6	(66.6–70.6)	1.9	56.6	(54.4–58.8)	8.2†
Poor	69.4	(66.4–72.2)	–1.6	57.9	(54.6–61.2)	3.4
Diabetes						
Yes	72.6	(70.2–75.0)	3.7	59.3	(56.6–62.0)	9.1
No	66.1	(65.0–67.0)	1.0	53.3	(52.2–54.4)	8.6
Mean	*66.9*	*(66.0–67.8)*	*1.5*	*54.1*	*(53.2–55.1)*	*8.8†*

*Confidence interval.
† CIs for 1997 and 1999 estimates do not overlap.
§ Numbers for other racial/ethnic groups were too small for meaningful analysis.

Influenza and Pneumococcal Vaccination Levels — Continued

TABLE 2. Percentage of persons aged ≥65 years who reported receiving influenza or pneumococcal vaccine, by reporting area and type of vaccine — Behavioral Risk Factor Surveillance System, United States, 1999

	Influenza			Pneumococcal		
Reporting area	%	(95% CI*)	% point difference 1997 to 1999	%	(95% CI)	% point difference 1997 to 1999
Alabama	64.6	(59.8–69.4)	2.1	53.9	(48.8–59.0)	6.4
Alaska	59.8	(48.7–70.8)	1.5	43.8	(33.0–54.6)	4.5
Arizona	71.3	(65.4–77.3)	–1.6	53.4	(46.8–60.0)	–6.0
Arkansas	67.3	(63.0–71.5)	6.2	50.2	(45.6–54.7)	11.1
California	72.2	(68.1–76.3)	6.7	57.0	(52.4–61.6)	7.1
Colorado	74.8	(69.2–80.3)	0.3	62.7	(56.6–68.9)	9.4
Connecticut	64.8	(59.8–69.8)	–2.5	49.0	(43.7–54.2)	5.9
Delaware	67.7	(62.2–73.2)	–0.9	66.5	(61.0–72.0)	13.9
District of Columbia	55.8	(49.1–62.6)	1.6	35.3	(28.8–41.7)	3.0
Florida	63.3	(59.8–66.8)	1.0	53.5	(50.2–57.0)	8.0
Georgia	57.0	(50.7–63.2)	–1.5	49.7	(43.3–56.1)	1.2
Hawaii	74.1	(68.0–80.2)	3.0	55.8	(49.0–62.6)	4.1
Idaho	69.0	(65.4–72.6)	2.5	55.2	(51.3–59.0)	5.0
Illinois†	67.5	(61.3–73.8)	–0.3	47.4	(40.6–54.1)	2.7
Indiana	66.2	(58.5–73.8)	3.6	51.6	(43.5–59.8)	13.6
Iowa	69.6	(66.0–73.1)	–0.1	61.2	(57.4–65.0)	9.8
Kansas	67.0	(63.5–70.5)	5.6	55.1	(51.3–58.8)	11.4
Kentucky	68.4	(65.4–71.3)	7.1	52.0	(48.7–55.3)	13.4
Louisiana	60.3	(54.3–66.3)	1.9	40.4	(34.3–46.4)	8.1
Maine	73.7	(68.4–79.0)	1.6	57.3	(51.4–63.1)	7.3
Maryland	62.6	(57.7–67.4)	–0.9	54.1	(49.1–59.2)	13.1
Massachusetts	69.4	(65.7–73.1)	3.3	56.8	(52.7–60.8)	4.0
Michigan	70.0	(65.5–74.5)	6.4	57.7	(52.8–62.7)	12.1
Minnesota	64.0	(60.6–67.4)	–5.0	51.9	(48.2–55.5)	3.6
Mississippi	62.8	(57.5–68.1)	1.7	50.4	(44.8–55.9)	4.5
Missouri	68.4	(64.3–72.5)	–1.9	52.8	(48.4–57.2)	8.5
Montana	72.9	(68.1–77.7)	4.5	61.2	(55.7–66.6)	10.3
Nebraska	69.2	(65.4–72.9)	3.4	54.8	(50.9–58.8)	5.0
Nevada	62.2	(53.9–70.4)	5.6	61.7	(53.3–70.1)	8.2
New Hampshire	65.1	(58.2–72.0)	0.5	60.4	(53.1–67.6)	10.7
New Jersey	65.3	(60.7–69.9)	4.6	55.1	(50.2–60.0)	21.1
New Mexico	68.8	(64.8–72.8)	–4.0	53.2	(48.7–57.8)	3.1
New York	63.8	(58.8–68.8)	–0.6	50.0	(44.7–55.2)	11.0
North Carolina	64.2	(59.6–68.7)	–0.4	58.5	(53.8–63.3)	7.9
North Dakota	67.2	(62.6–71.8)	2.4	55.0	(50.1–59.9)	14.2
Ohio	68.8	(63.6–74.1)	3.5	55.0	(49.3–60.7)	16.4
Oklahoma	71.8	(68.0–75.7)	2.5	53.7	(49.5–57.9)	13.3
Oregon§	65.2	(59.7–70.6)	–4.7	56.2	(50.5–61.9)	0.3
Pennsylvania	63.1	(59.1–67.1)	–2.6	52.2	(48.1–56.4)	5.2
Puerto Rico	40.3	(36.2–44.4)	–1.2	21.8	(18.3–25.3)	–12.0
Rhode Island	75.8	(72.4–79.2)	8.1	56.9	(53.0–60.9)	13.9
South Carolina	69.9	(65.7–74.2)	–4.4	56.1	(51.4–60.8)	14.5
South Dakota	73.6	(70.6–76.6)	8.1	50.4	(46.9–53.9)	9.7
Tennessee	65.5	(61.1–69.9)	–3.6	54.3	(49.6–59.0)	9.3
Texas	69.8	(65.9–73.8)	1.8	55.9	(51.5–60.2)	11.4
Utah	75.1	(70.4–79.9)	9.0	61.3	(55.9–66.7)	12.8
Vermont	73.4	(69.7–77.2)	4.0	56.5	(52.1–60.9)	4.8
Virginia	65.7	(60.4–70.9)	–2.0	55.2	(49.7–60.8)	1.6
Washington	68.9	(64.8–73.1)	–1.3	55.8	(51.4–60.3)	4.3
West Virginia	62.9	(58.7–67.0)	4.7	54.3	(50.0–58.6)	13.0
Wisconsin	64.9	(59.8–70.0)	–1.2	53.7	(48.3–59.1)	11.1
Wyoming	73.8	(69.2–78.5)	1.4	61.5	(56.3–66.7)	10.6
Range	*40.3–75.8*			*21.8–66.5*		
Median	*67.4*			*54.9*		

*Confidence interval.
†A dual design was used and vaccination questions were asked of only half of the respondents.
§Includes data from first quarter of 1999 interviews only.

Influenza and Pneumococcal Vaccination Levels — Continued

The proportion of respondents reporting having ever received a pneumococcal vaccination increased from 45.4% (95% CI=44.4%–46.3%) in 1997 to 54.1% (95% CI=53.2%–55.1%) in 1999 (Table 1). Estimated prevalence of pneumococcal vaccination was ≥50% in 45 states and ≥60% in eight states (Table 2). In one of the eight states with point estimates ≥60%, the lower 95% CI also exceeded 60%. In 16 of 44 areas with estimated prevalence <60%, the 95% CI included 60%. From 1997 to 1999, pneumococcal vaccination prevalence estimates increased in 49 areas (median percentage point difference among the 52 reporting areas: 8.4; range: –12.0–21.1).

Non-Hispanic black and Hispanic respondents were significantly less likely than non-Hispanic white respondents to report vaccination against influenza (blacks: OR=0.41; 95% CI=0.35–0.48, and Hispanics: OR=0.68; 95% CI=0.53–0.88) or pneumococcal disease (blacks: OR=0.44; 95% CI=0.37–0.53, and Hispanics: OR=0.43, 95% CI=0.34–0.56) based on the logistic regression analysis ($p<0.05$). These differences were not explained by variations in age, sex, education level, length of time since last check-up, self-reported health, or diabetes status. A significant change in vaccination coverage from 1997 to 1999 among racial/ethnic populations was an increase in pneumococcal vaccination among non-Hispanic whites (Table 1).

Other factors independently associated with vaccination status based on the logistic regression analysis were age, education level, length of time since last check-up, and health status ($p<0.05$). Persons aged ≥75 years were more likely to report influenza or pneumococcal vaccination than persons aged 65–74 years (Table 1). Persons with diabetes were more likely to report vaccination, compared with those who did not have diabetes. Coverage increased as education level increased, self-reported health declined, and length of time since last check-up decreased.

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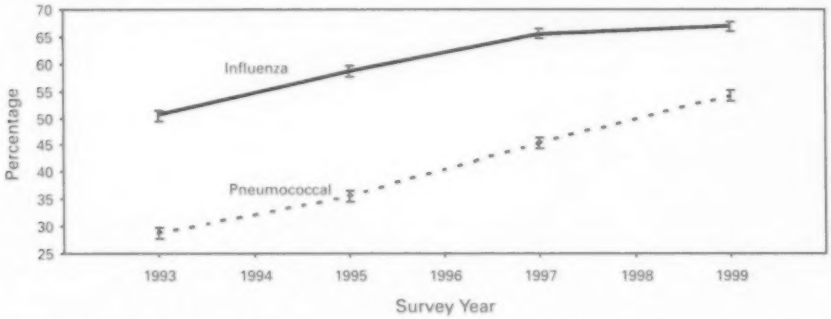
Editorial Note: The findings in this report indicate that by 1999 coverage levels among persons aged ≥65 years approached or exceeded the 2000 national objective for influenza vaccination in all states and for pneumococcal vaccination in 24 states. Pneumococcal vaccination coverage increased linearly from 1993 to 1999; the rate of increase for influenza vaccination coverage was lower from 1997 to 1999 than from 1993 to 1997 (Figure 1). Similar findings were observed in the 1993–1998 National Health Interview Surveys (NHIS), which monitors progress toward the national health objectives (*5*; CDC, unpublished data, 2000). Self-reported influenza vaccination in the

Influenza and Pneumococcal Vaccination Levels — Continued

FIGURE 1. Percentage of persons aged ≥65 years who reported receiving influenza or pneumococcal vaccine, by year — Behavioral Risk Factor Surveillance System, United States, 1993–1999



1999 BRFSS mainly reflected vaccinations received for the 1998–99 influenza season. Vaccination coverage for subsequent seasons will be monitored using BRFSS and NHIS to determine whether influenza vaccination coverage for this population reached a plateau by the 1999–2000 season and the effect of delays in influenza vaccine supply during the 2000–01 season and projected for 2001–02. Preliminary NHIS estimates of influenza vaccination coverage among older adults were 66.6% for those interviewed during the first 6 months of 1999 and 68.1% for the first 6 months of 2000 (http://www.cdc.gov/nchs/nhis.htm).

In addition to increasing influenza and pneumococcal vaccination to ≥90% among persons aged ≥65 years by 2010, another national health objective is to eliminate health disparities among diverse populations (*6*). Racial/ethnic disparities continued in vaccination levels from 1997 to 1999. Influenza vaccination levels were lower among persons with less than a high school education or aged 65–74 years than among persons with higher education levels or older age.

Pneumococcal vaccination coverage lagged behind influenza vaccination coverage and was <60% even among persons most likely to visit a health-care provider (e.g., those reporting a check-up within the preceding 12 months, poor health, or diabetes). Health-care providers should use every opportunity to assess the vaccination status of patients and offer indicated vaccines. Annual influenza vaccination provides such an opportunity; influenza and pneumococcal vaccines can be administered concurrently at different sites without increasing side effects, and pneumococcal vaccine should be administered to patients who are uncertain about their vaccination history (*5*).

The findings in this report are subject to at least two limitations. First, vaccination status was self-reported and not validated; self-report of influenza vaccination may be more reliable than self-report of pneumococcal vaccination (*7*). In addition, recall of pneumococcal vaccination may be more accurate for persons aged 65–74 years than for those aged ≥75 years (*8*). Second, BRFSS excludes nursing-home residents and other institutionalized populations and households without telephones or with only cellular phones; however, vaccination coverage among older adults estimated from the 1997 NHIS increased only slightly when households without telephones were excluded (from 63.2% to 64.1% for influenza and from 42.4% to 43.0% for pneumococcal) (CDC, unpublished data, 2000).

Influenza and Pneumococcal Vaccination Levels — Continued

Multiple factors underscore the need to assess local, state, and national adult vaccination programs (*9*), including a possible plateau in influenza vaccination levels among older adults, failure nationally and in most states to meet the 2000 objective for pneumococcal vaccination, racial/ethnic and socioeconomic disparities in vaccination coverage, delays in the distribution of the influenza vaccine reported during the 2000–01 season (*1,5*), and projected delays during 2001–02 (http://www.cdc.gov/nip/flu/acip-june21.htm). To achieve and sustain ≥90% vaccination among these populations, public, private, and community partners must collaborate to improve vaccine use among older persons and to strengthen the influenza vaccine supply. When supply problems are anticipated, delivery of the first available vaccine should target older persons and others at high risk; for the 2001–02 season, providers should target vaccine available in September and October to these groups and to health-care workers. Physicians can improve coverage using strategies such as provider reminder/recall, assessment and feedback, and standing orders (*10*); however, methods are needed to identify and increase the number of health-care providers using these strategies. Even with such strategies, providers may be unable to achieve the 2010 objective among older patients during October–November, the optimal period for influenza vaccination. Providers should continue to vaccinate through December and as long as vaccine is available. Other interventions include increasing community demand for vaccinations using client reminder/recall and education campaigns (*10*), enhancing access to vaccination services by reducing out-of-pocket costs (*10*), and offering vaccination in community settings such as senior centers and drug stores.

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Routinely Recommended HIV Testing at an Urban Urgent-Care Clinic — Atlanta, Georgia, 2000

In 1993, CDC recommended that hospitals and associated clinics in areas with high human immunodeficiency virus (HIV) prevalence offer HIV testing routinely to all patients aged 15–54 years (*1*). Although voluntary routine screening among hospitalized (*2*) and emergency department patients (*3*) can identify many undiagnosed HIV-infected persons, few screening programs have been implemented in these settings. A 1997 study at Grady Memorial Hospital, Atlanta, Georgia, found that nearly two thirds of inpatients newly diagnosed with acquired immunodeficiency syndrome (AIDS) had received medical care within the Grady health system during the 12 months preceding admission* (*4*); these previous encounters were missed opportunities for earlier diagnosis of HIV. In response to the 1997 study, investigators studied routinely recommending HIV testing to patients presenting to the urgent-care clinic, an ambulatory clinic that provides episodic medical care to indigent and low income adults. This report summarizes the results of that study in which, compared with 1999 when testing was based on symptoms or risk behaviors, more patients were tested for HIV, more HIV infections were detected, and more infected persons learned their diagnosis and entered into care. These results reflect the benefits of recommending HIV testing routinely to patients in medical facilities located in areas with high HIV prevalence.

For 24 weeks (i.e., March 20–September 1, 2000), clinicians were encouraged to recommend HIV testing to all urgent-care clinic patients aged 18–65 years who were neither known to be HIV seropositive† nor tested during the preceding 6 months. These 24 weeks were compared with testing during the same 24 weeks in 1999, when HIV testing was conducted only when clinicians were concerned about patients' symptoms or risk behaviors. During the study period, posters encouraging patients to be tested for HIV were displayed prominently, and patients received a brochure about HIV and HIV testing before discussions with their heath-care providers. Patients who accepted testing provided written consent and were not charged for HIV testing, which was conducted with either a rapid test (Single Use Diagnostic System [SUDS] HIV-1 Test [Abbott-Murex Corporation, Norcross, Georgia]) or a standard enzyme immunoassay (EIA). All SUDS tests were supplemented with EIA; all positive SUDS and EIA tests were confirmed with Western blot. Clinicians, counselors, or study investigators trained in HIV counseling delivered test results; a physician's assistant telephoned or wrote to HIV-seropositive persons who had left before their SUDS results were available or who did not return to the clinic for their EIA result. The study was approved by the human subjects research committees of CDC, Emory University, and the Grady Research Oversight Committee.

Patients were defined as knowing their test result if discussion of results was documented in the medical record or clinic HIV testing log or if patients had a CD4 test within 2 months after their positive HIV test. Entry into care was defined by a record of a visit to the Grady infectious disease clinic within 4 months following the positive HIV test.

Approximately 20,000 clinic visits occurred during each of the two periods (i.e., 1999 and 2000) (Table 1). Comparing 2000 with 1999, 1687 more patients were tested, 27 more infections were newly detected, 27 more patients were informed of their HIV-

*Median of four visits per patient; the most frequented departments were the emergency department and the urgent-care clinic.

†Based on patient interview and medical record review.

Routinely Recommended HIV Testing — Continued

TABLE 1. Number of persons tested for HIV based on risk and symptoms during 24 weeks in 1999 compared with the number of persons routinely recommended for HIV testing in 2000 at an urgent-care clinic — Atlanta, Georgia, March 20–September 1, 1999, and 2000

Test process	Risk- and symptom-based testing 1999 No.	Routinely recommended testing 2000 No.	Increase from 1999 to 2000	Ratio	p value
Clinic visits	19,626	19,911	285	1.0	
HIV tests conducted	1,100	2,787	1,687	2.5	<0.001
Newly detected infections*	47	74	27	1.6	0.02
HIV-positive patients who learned they were infected†	28	55	27	2.0	0.004
HIV-positive patients who entered into care§	13	26	13	2.0	0.04

*Positive HIV test result (Western blot).

†Evidence that patient was informed of HIV-positive test result (i.e., documentation in the medical record or clinic HIV testing log of delivery of results to patient or evidence of CD4 test within the Grady health system within 2 months after the positive HIV test).

§Record of patient visit to the Grady infectious disease clinic within 4 months following the positive HIV test.

positive test result, and twice as many HIV-seropositive patients (26 versus 13) entered into care[§] (Table 1). During the study, infected persons may have had HIV detected at an earlier stage of infection; 28 (67%) of 42 persons had a CD4+ T cell count >200 cells/μL during the study period compared with 10 (45%) of 22 during 1999 (p=0.1). Additional information on HIV test eligibility, provider recommendations, and testing patterns was collected from 8 a.m. to 5 p.m. weekdays during the study period[¶]. Among the 13,039 patient visits to the urgent-care clinic during these hours, 10,719 were eligible to be offered HIV testing. Among those eligible, 6421 (60%) were offered testing and 2564 (40%) accepted. Among those who accepted testing, 1839 (72%) were actually tested. Among 886 patients tested with SUDS, 236 (27%) received results the same day.

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Editorial Note: HIV testing usually relies on a patient's request or a health-care provider's concern about symptoms or risk behaviors. This report indicates that when providers at an urgent-care clinic in a high prevalence area routinely recommended HIV testing, more persons were tested, more HIV infections were detected, and more patients with newly detected infections learned their diagnosis and entered into care. Patients often were diagnosed earlier in the course of their infection.

Despite the benefits of routinely recommended testing, barriers to this approach exist, as demonstrated by the proportion of patients who were not offered testing, did not accept testing, and were not tested once they had accepted. In addition, 26% of patients

§This intervention was neither designed nor expected to improve the proportion of infected persons who entered into care; the proportion was approximately the same for the two periods (i.e., 13 [46%] of 28 in 1999 and 26 [47%] of 55 in 2000).

¶Urgent-care clinic hours during 1999 and 2000 were Monday–Friday from 8 a.m. to 10 p.m. and weekends from 9 a.m. to 7 p.m.

Routinely Recommended HIV Testing — Continued

with newly detected infections did not learn their HIV-positive diagnosis, and 53% of those who learned their diagnosis did not enter into medical care.

The findings in this report are subject to at least four limitations. First, some newly diagnosed patients may have sought care from providers outside the Grady health system (e.g., private providers or other public health facilities) and would not have been recorded as having received care. Second, the large proportion of patients tested during both periods for whom CD4 count data were unavailable limited the comparison of the stage of infection among patients diagnosed in 1999 with those diagnosed in 2000. Third, the proportions of patients who were eligible for, offered, accepted, and were actually tested from 8 a.m. to 5 p.m. weekdays may have differed from the 1999 comparison period or other study hours. Finally, no data were available to evaluate whether characteristics of the clinic population changed between comparison periods.

The findings in this study suggest some strategies clinics can use to increase the acceptance, feasibility, and effectiveness of routinely recommended testing. To increase the numbers of patients providers recommend for testing, providers must be convinced that time demands will not be excessive; to increase the number of patients who accept testing, patients must believe that HIV testing and the subsequent results are relevant. HIV risk can be assessed quickly using screening questions, and patients can be referred for client-centered prevention counseling when necessary (*5*). In this study, posters and brochures provided basic HIV test information and helped providers focus on issues specific to the individual patient. Rapid tests that could be performed in the clinic rather than a hospital laboratory and that could use either oral fluids or whole blood obtained by fingerstick** might increase the acceptability of HIV testing and the number of patients that receive test results in a clinic. In addition, medical centers must develop clear, concise strategies that would facilitate medical care and prevention counseling for newly diagnosed patients. Convenient and efficient links to HIV medical care are benefits to having HIV testing in a clinic; however, informing patients of their diagnosis is insufficient to ensure that they will receive HIV-specific medical care.

Testing for HIV infection in high HIV prevalence areas has become more important and more feasible since 1993. Medical therapy now can reduce substantially HIV-related morbidity and mortality, prevention counseling can help HIV-infected persons protect their partners by adopting safer behaviors, and earlier HIV diagnosis increases the benefits of both treatment and prevention (*6*). Approximately 300,000 HIV-infected persons in the United States may not know that they are infected (*7*), and missed opportunities for earlier diagnosis of HIV frequently occur in medical settings (*4*).

Recommending HIV testing routinely in clinical settings presents an opportunity to target high prevalence communities, destigmatize HIV testing, and better link HIV-infected persons to care and prevention services. Counseling and testing are potentially cost saving because they can reduce transmission (*8*); however, institutions are unlikely to absorb these costs. Public health departments and other HIV prevention programs can assist with financial and/or human resources in implementing routinely recommended HIV testing at clinics in high HIV prevalence areas. Health departments and administrators of clinical facilities in such areas are encouraged to adopt a policy of routinely recommending HIV testing.

** Such tests would eliminate the need to wait for a phlebotomist, have blood drawn, and return for a second visit to receive test results. SUDS, the only rapid HIV test licensed in the United States, is labor intensive, and most patients tested with SUDS in this study did not receive their SUDS result on the same day that it was performed.

Routinely Recommended HIV Testing — Continued

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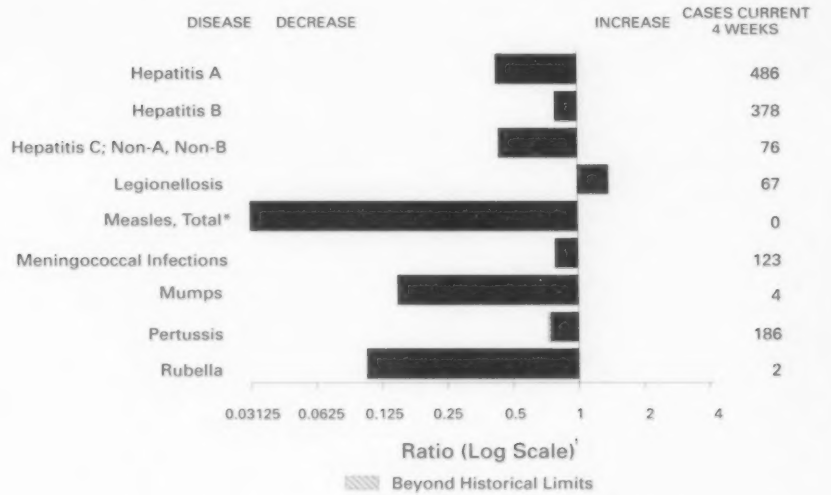
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending June 23, 2001, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 25 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending June 23, 2001 (25th Week)

	Cum. 2001		Cum. 2001
Anthrax	-	Poliomyelitis, paralytic	-
Brucellosis*	31	Psittacosis*	6
Cholera	2	Q fever*	7
Cyclosporiasis*	71	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	122
Ehrlichiosis: human granulocytic (HGE)*	32	Rubella, congenital syndrome	-
human monocytic (HME)*	18	Streptococcal disease, invasive, group A	1,868
Encephalitis: California serogroup viral*	-	Streptococcal toxic-shock syndrome*	31
eastern equine*	-	Syphilis, congenital†	84
St. Louis*	-	Tetanus	12
western equine*	-	Toxic-shock syndrome	57
Hansen disease (leprosy)*	29	Trichinosis	5
Hantavirus pulmonary syndrome*†	4	Tularemia*	30
Hemolytic uremic syndrome, postdiarrheal*	33	Typhoid fever	117
HIV infection, pediatric*†	84	Yellow fever	-
Plague	1		

-: No reported cases.
*Not notifiable in all states.
† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update May 29, 2001.
§ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 23, 2001, and June 24, 2000 (25th Week)

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7*			
							NETSS		PHLIS	
	Cum. 2001§	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	15,380	18,050	307,664	327,962	749	730	688	1,082	447	923
NEW ENGLAND	586	1,100	10,668	10,943	32	44	82	110	48	109
Maine	18	16	591	661	3	9	11	6	7	6
N.H.	14	17	595	495	1	2	13	6	7	9
Vt.	10	17	277	258	13	13	2	4	1	6
Mass.	332	762	4,875	4,644	8	12	32	54	21	49
R.I.	44	40	1,339	1,252	3	2	4	6	2	8
Conn.	168	248	2,991	3,633	4	6	20	34	10	31
MID. ATLANTIC	3,108	4,466	33,512	31,093	85	139	55	130	38	96
Upstate N.Y.	182	426	5,709	530	37	35	41	91	25	38
N.Y. City	1,587	2,451	13,895	13,390	42	80	4	9	3	7
N.J.	746	896	4,548	5,766	3	5	10	30	10	26
Pa.	593	693	9,360	11,407	3	19	N	N	-	25
E.N. CENTRAL	1,163	1,604	43,899	56,472	230	161	168	209	99	140
Ohio	198	196	5,821	14,597	51	22	51	32	33	32
Ind.	119	146	6,783	6,259	29	11	28	22	11	24
Ill.	558	1,003	12,222	16,357	1	22	33	63	19	40
Mich.	224	191	14,361	11,345	63	24	26	33	19	26
Wis.	64	68	4,712	7,914	86	82	30	59	17	18
W.N. CENTRAL	355	382	15,912	18,449	66	55	85	135	74	148
Minn.	67	86	2,876	3,810	24	11	30	38	37	50
Iowa	40	36	1,490	2,389	20	15	15	22	7	23
Mo.	168	151	5,764	6,300	7	8	17	33	18	34
N. Dak.	1	1	464	440	3	5	1	7	3	6
S. Dak.	9	3	870	851	4	5	6	7	5	11
Nebr.	27	25	1,571	1,748	8	8	7	19	-	18
Kans.	43	80	2,877	2,911	-	3	9	9	4	6
S. ATLANTIC	4,910	4,778	59,478	60,295	143	106	71	85	29	71
Del.	84	78	1,405	1,402	1	4	-	1	-	-
Md.	591	592	5,759	6,243	27	6	4	10	-	1
D.C.	360	317	1,593	1,541	9	4	-	-	U	U
Va.	388	316	8,351	7,620	8	4	19	18	8	18
W. Va.	35	27	1,112	1,014	-	3	2	3	-	3
N.C.	212	310	8,083	10,481	15	10	25	16	11	15
S.C.	340	374	5,535	4,726	-	-	2	6	2	6
Ga.	579	430	11,691	11,994	48	55	10	13	2	13
Fla.	2,321	2,334	15,949	15,274	35	20	9	18	6	15
E.S. CENTRAL	836	896	22,106	23,654	17	23	28	44	18	34
Ky.	181	113	4,206	3,826	1	1	8	15	8	13
Tenn.	249	359	7,069	6,925	3	5	13	16	9	15
Ala.	182	207	5,350	7,281	6	9	6	4	-	4
Miss.	224	217	5,481	5,622	7	8	1	9	1	2
W.S. CENTRAL	1,617	1,806	48,769	49,752	16	35	31	118	39	143
Ark.	89	99	3,522	2,961	2	1	2	31	-	26
La.	403	290	8,126	9,048	7	8	2	7	14	18
Okla.	90	161	5,234	4,329	5	3	10	7	10	7
Tex.	1,035	1,256	31,887	33,414	2	23	17	73	15	92
MOUNTAIN	636	639	16,583	19,338	52	37	78	97	40	85
Mont.	12	7	1,015	752	5	6	5	12	-	-
Idaho	14	13	839	864	6	3	12	12	-	5
Wyo.	1	5	368	354	-	5	1	6	1	5
Colo.	126	155	1,618	5,755	16	10	33	38	20	24
N. Mex.	50	58	2,600	2,405	10	1	7	3	2	3
Ariz.	258	172	7,047	6,120	2	2	10	21	9	18
Utah	53	62	697	1,261	11	8	6	4	7	8
Nev.	122	167	2,399	1,827	2	2	4	1	1	2
PACIFIC	2,169	2,379	56,737	57,966	108	130	90	154	62	117
Wash.	247	244	6,568	6,191	N	U	23	50	13	66
Oreg.	104	86	1,447	3,387	5	7	17	22	13	27
Calif.	1,787	1,965	46,927	45,507	101	123	47	73	34	16
Alaska	9	5	1,261	1,199	-	-	1	1	-	1
Hawaii	22	79	534	1,682	2	-	2	8	2	7
Guam	9	13	-	243	-	-	N	N	U	U
P.R.	535	431	2,154	U	-	-	-	5	U	U
V.I.	2	21	53	-	-	-	-	-	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	56	U	-	U	-	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update May 29, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending June 23, 2001, and June 24, 2000 (25th Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	138,907	162,016	1,059	1,639	332	356	190	1,556	4,039
NEW ENGLAND	2,908	3,032	14	14	19	23	24	483	887
Maine	65	35	-	1	1	2	-	-	-
N.H.	64	52	-	-	5	2	-	56	36
Vt.	38	29	6	3	4	1	-	1	8
Mass.	1,483	1,196	8	7	4	10	13	51	354
R.I.	345	308	-	3	1	3	1	46	26
Conn.	913	1,412	-	-	4	5	10	329	463
MID. ATLANTIC	15,070	17,193	41	357	38	90	29	642	2,441
Upstate N.Y.	3,522	3,055	28	15	25	26	12	464	589
N.Y. City	5,807	5,584	-	-	4	12	5	1	94
N.J.	1,409	3,238	-	318	5	8	7	84	1,065
Pa.	4,332	5,316	13	24	4	44	5	93	693
E.N. CENTRAL	23,476	32,594	105	125	84	93	24	56	235
Ohio	3,572	8,321	5	3	46	36	6	36	16
Ind.	2,787	2,845	1	-	7	12	4	2	4
Ill.	7,392	9,935	10	12	-	9	-	-	17
Mich.	8,266	8,140	89	110	21	17	13	-	9
Wis.	1,459	3,353	-	-	10	19	1	18	189
W.N. CENTRAL	6,664	7,909	380	284	29	18	5	58	47
Minn.	920	1,531	2	4	6	1	-	37	15
Iowa	392	490	-	1	6	3	-	10	1
Mo.	3,434	3,822	374	273	10	10	2	8	17
N. Dak.	15	34	-	-	1	-	-	-	-
S. Dak.	132	127	-	-	1	1	-	-	-
Nebr.	540	660	1	2	4	1	1	1	2
Kans.	1,231	1,245	3	4	1	2	2	2	12
S. ATLANTIC	35,997	42,234	52	40	61	63	30	245	345
Del.	773	794	-	2	-	4	-	15	65
Md.	3,176	4,178	9	4	17	17	2	158	215
D.C.	1,360	1,082	-	1	2	-	-	7	1
Va.	4,290	4,808	-	1	7	9	5	45	40
W. Va.	290	319	6	5	N	N	4	1	8
N.C.	6,736	8,484	9	13	5	8	-	7	9
S.C.	4,018	4,533	3	1	1	2	2	2	2
Ga.	6,344	7,428	-	2	4	4	9	-	-
Fla.	9,010	10,608	25	11	25	19	8	10	5
E.S. CENTRAL	14,055	16,788	108	230	32	11	8	10	16
Ky.	1,626	1,600	3	17	7	5	2	2	4
Tenn.	4,598	5,321	31	55	15	3	3	5	9
Ala.	4,321	5,651	2	7	8	2	3	3	2
Miss.	3,510	4,216	72	151	2	1	-	-	1
W.S. CENTRAL	23,517	25,572	161	474	5	17	5	7	25
Ark.	2,172	1,559	3	3	-	-	1	-	-
La.	5,615	6,360	74	246	2	7	-	1	3
Okla.	2,371	1,858	3	2	3	1	1	-	-
Tex.	13,359	15,795	81	223	-	9	3	6	22
MOUNTAIN	4,914	4,950	135	35	26	17	20	5	2
Mont.	53	26	-	2	-	-	-	-	-
Idaho	37	43	1	3	1	3	1	2	-
Wyo.	29	30	101	2	1	-	1	1	1
Colo.	1,503	1,541	11	5	8	6	3	1	-
N. Mex.	414	517	10	8	1	1	5	-	-
Ariz.	1,948	2,006	8	11	9	2	4	-	-
Utah	62	126	1	-	4	5	1	-	-
Nev.	868	661	3	4	2	-	5	1	1
PACIFIC	12,306	11,744	63	80	38	24	45	50	41
Wash.	1,408	1,085	16	10	6	8	3	2	-
Oreg.	223	424	8	16	N	N	1	3	3
Calif.	10,373	9,857	39	54	31	16	40	45	37
Alaska	167	156	-	-	-	-	-	-	1
Hawaii	135	222	-	-	1	-	1	N	N
Guam	-	25	-	1	-	-	-	-	-
P.R.	509	268	1	1	2	-	-	N	N
V.I.	6	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	3	U	-	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending June 23, 2001, and June 24, 2000 (25th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
					NETSS		PHLIS	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	424	549	2,719	3,138	12,232	14,303	9,222	12,678
NEW ENGLAND	31	22	288	346	973	856	806	880
Maine	3	4	34	69	101	59	74	38
N.H.	2	1	7	4	76	56	65	59
Vt.	-	2	36	32	35	52	34	51
Mass.	9	9	94	112	512	507	393	501
R.I.	3	4	27	16	56	32	67	58
Conn.	14	2	90	113	193	150	173	173
MID. ATLANTIC	79	119	399	549	1,306	2,145	1,485	2,188
Upstate N.Y.	19	26	305	329	441	485	376	555
N.Y. City	40	60	11	5	414	562	470	573
N.J.	14	16	76	72	295	545	218	424
Pa.	6	17	7	143	156	553	421	636
E.N. CENTRAL	45	67	29	35	1,753	2,059	1,232	1,278
Ohio	9	8	13	6	606	494	412	464
Ind.	10	3	1	-	177	234	141	251
Ill.	1	35	4	1	397	652	255	1
Mich.	17	15	11	20	333	393	275	415
Wis.	8	6	-	8	240	286	149	147
W.N. CENTRAL	16	24	161	279	760	935	750	1,052
Minn.	6	7	18	38	211	206	279	286
Iowa	1	1	35	39	129	117	95	127
Mo.	5	5	13	14	202	307	247	362
N. Dak.	-	2	24	74	14	27	22	37
S. Dak.	-	-	21	57	52	35	39	43
Nebr.	2	3	1	-	56	87	-	70
Kans.	2	6	49	57	97	156	68	127
S. ATLANTIC	120	121	986	1,093	2,900	2,402	1,642	2,075
Del.	1	3	18	20	36	42	33	55
Md.	48	39	115	213	317	318	262	314
D.C.	9	8	-	-	33	26	U	U
Va.	24	26	213	275	469	347	328	353
W. Va.	1	-	62	56	48	60	48	59
N.C.	2	11	284	282	437	337	272	337
S.C.	4	1	60	59	313	212	272	176
Ga.	8	4	135	123	417	385	351	588
Fla.	23	29	99	63	831	675	76	193
E.S. CENTRAL	11	19	91	89	709	700	416	564
Ky.	2	5	10	12	127	150	81	110
Tenn.	6	5	62	47	207	166	187	246
Ala.	3	8	19	30	229	195	109	175
Miss.	-	1	-	-	146	189	39	33
W.S. CENTRAL	6	32	481	481	1,083	1,689	898	983
Ark.	3	1	-	-	197	176	92	119
La.	1	4	-	-	240	285	214	205
Okla.	1	3	39	35	100	137	81	112
Tex.	1	24	442	446	546	1,091	511	547
MOUNTAIN	25	21	108	119	869	1,126	607	1,050
Mont.	2	1	16	32	36	53	-	-
Idaho	3	-	2	1	52	61	4	53
Wyo.	-	-	16	33	28	31	22	26
Colo.	11	11	-	-	239	345	200	330
N. Mex.	1	-	4	8	111	98	75	101
Ariz.	3	2	68	42	244	255	206	272
Utah	3	3	1	2	97	166	77	163
Nev.	2	4	1	1	62	117	23	105
PACIFIC	91	124	176	147	1,879	2,391	1,386	2,608
Wash.	3	11	-	-	202	199	205	278
Oreg.	5	22	-	2	87	152	125	194
Calif.	79	85	143	122	1,498	1,930	930	2,025
Alaska	1	-	33	23	21	24	2	20
Hawaii	3	6	-	-	71	86	124	91
Guam	-	-	-	-	-	13	U	U
P.R.	3	4	61	32	274	212	U	U
V.I.	-	-	-	-	-	-	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	5	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending June 23, 2001, and June 24, 2000 (25th Week)

Reporting Area	Shigellosis* NETSS Cum. 2001	Shigellosis* NETSS Cum. 2000	Shigellosis* PHLIS Cum. 2001	Shigellosis* PHLIS Cum. 2000	Syphilis (Primary & Secondary) Cum. 2001	Syphilis (Primary & Secondary) Cum. 2000	Tuberculosis Cum. 2001	Tuberculosis Cum. 2000
UNITED STATES	5,974	9,237	2,792	5,139	2,531	2,962	5,086	6,338
NEW ENGLAND	100	159	86	147	24	43	197	185
Maine	4	5	1	-	-	1	5	3
N.H.	2	1	2	6	1	1	10	4
Vt.	3	1	2	-	2	-	2	3
Mass.	65	114	52	101	13	29	107	113
R.I.	7	10	11	13	3	3	19	17
Conn.	19	28	18	27	5	9	54	45
MID. ATLANTIC	554	1,332	343	820	204	142	1,066	1,061
Upstate N.Y.	297	401	15	147	10	6	136	126
N.Y. City	168	605	196	385	120	62	564	572
N.J.	40	209	67	180	46	30	237	244
Pa.	49	117	65	108	28	44	129	119
E.N. CENTRAL	952	1,900	423	560	421	630	543	604
Ohio	434	125	188	102	41	34	79	137
Ind.	118	682	19	62	81	210	38	58
Ill.	172	527	105	2	109	220	285	279
Mich.	147	397	98	362	180	136	109	89
Wis.	81	169	13	32	10	30	32	41
W.N. CENTRAL	637	845	461	705	28	40	196	231
Minn.	217	219	240	252	12	4	100	78
Iowa	144	196	84	165	1	10	18	19
Mo.	123	324	81	227	7	21	52	83
N. Dak.	13	4	2	4	-	-	3	2
S. Dak.	67	2	37	1	-	-	6	9
Nebr.	32	29	-	19	-	2	17	10
Kans.	41	71	17	37	8	3	-	30
S. ATLANTIC	943	1,062	260	423	960	961	1,036	1,265
Del.	4	7	4	7	5	5	9	3
Md.	54	53	26	23	112	142	93	117
D.C.	23	13	U	U	20	20	15	7
Va.	75	157	27	160	63	67	110	133
W. Va.	4	3	6	3	-	1	14	17
N.C.	183	59	78	32	224	281	158	175
S.C.	106	59	46	49	130	102	100	144
Ga.	103	115	57	92	135	166	173	258
Fla.	391	596	16	57	271	177	364	411
E.S. CENTRAL	602	444	223	289	280	440	318	433
Ky.	228	120	96	45	22	48	42	53
Tenn.	44	202	38	220	156	273	99	166
Ala.	125	27	78	21	51	59	129	141
Miss.	205	95	11	3	51	60	48	73
W.S. CENTRAL	933	1,551	650	457	328	397	520	956
Ark.	308	89	155	24	19	47	66	91
La.	104	148	81	83	61	95	-	71
Okla.	18	55	2	20	34	66	67	61
Tex.	503	1,249	412	330	214	189	387	733
MOUNTAIN	356	417	206	275	102	104	178	227
Mont.	-	4	-	-	-	-	-	6
Idaho	16	29	-	20	-	-	4	4
Wyo.	-	2	-	2	-	1	1	1
Colo.	68	79	54	37	20	5	53	31
N. Mex.	55	44	33	24	9	9	11	28
Ariz.	164	152	89	104	63	85	65	82
Utah	24	34	22	37	6	1	9	22
Nev.	29	73	8	51	4	3	35	53
PACIFIC	897	1,527	140	1,463	184	205	1,032	1,376
Wash.	81	315	76	277	30	35	97	111
Oreg.	29	94	46	59	4	8	46	41
Calif.	771	1,091	-	1,106	148	161	847	1,098
Alaska	3	6	1	3	-	-	21	59
Hawaii	13	21	17	18	2	1	21	67
Guam	-	19	U	U	-	2	-	28
P.R.	6	14	U	U	129	88	51	70
V.I.	-	-	U	U	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	4	U	U	U	-	U	19	U

N: Not notifiable. U: Unavailable. -: No reported cases.

*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 23, 2001, and June 24, 2000 (25th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
			A		B		Indigenous		Imported*		Total	
	Cum. 2001†	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	682	676	4,366	6,120	2,927	3,280	-	40	-	25	65	48
NEW ENGLAND	35	51	212	157	45	52	-	4	-	1	5	3
Maine	1	1	5	7	5	5	-	-	-	-	-	-
N.H.	-	8	5	13	11	10	-	-	-	-	-	-
Vt.	1	3	6	4	2	5	-	1	-	-	1	3
Mass.	25	29	60	63	4	3	-	2	-	1	3	-
R.I.	2	1	8	7	11	9	-	-	-	-	-	-
Conn.	6	9	128	63	12	20	-	1	-	-	1	-
MID. ATLANTIC	84	125	382	631	424	567	-	2	-	5	7	13
Upstate N.Y.	37	46	122	108	66	62	-	1	-	4	5	2
N.Y. City	24	36	162	246	254	263	-	-	-	-	-	10
N.J.	21	25	70	106	64	95	-	-	-	1	1	-
Pa.	2	19	28	171	40	147	-	1	-	-	1	1
E.N. CENTRAL	87	101	476	794	367	352	-	-	-	10	10	6
Ohio	43	32	112	136	59	60	-	-	-	3	3	2
Ind.	22	11	43	25	18	26	-	-	-	4	4	-
Ill.	10	38	136	342	51	46	-	-	-	3	3	3
Mich.	6	7	157	245	239	204	-	-	-	-	-	1
Wis.	6	13	28	46	-	16	-	-	-	-	-	-
W.N. CENTRAL	31	31	194	432	104	143	-	4	-	-	4	1
Minn.	15	16	14	113	13	16	-	2	-	-	2	1
Iowa	-	-	18	44	13	15	-	-	-	-	-	-
Mo.	10	8	54	193	55	76	-	2	-	-	2	-
N. Dak.	4	2	2	2	-	2	-	-	-	-	-	-
S. Dak.	-	-	1	-	1	-	-	-	-	-	-	-
Nebr.	1	3	24	19	11	23	-	-	-	-	-	-
Kans.	1	2	81	61	11	11	-	-	-	-	-	-
S. ATLANTIC	221	157	944	600	637	545	-	3	-	1	4	-
Del.	-	-	-	10	-	7	-	-	-	-	-	-
Md.	51	42	128	74	69	68	-	2	-	1	3	-
D.C.	-	-	21	11	8	16	-	-	-	-	-	-
Va.	16	28	68	71	72	74	-	-	-	-	-	-
W. Va.	5	4	6	43	14	6	-	-	-	-	-	-
N.C.	29	15	63	89	105	123	-	-	-	-	-	-
S.C.	5	5	27	23	11	5	-	-	-	-	-	-
Ga.	58	45	369	80	165	90	-	1	-	-	1	-
Fla.	57	18	264	199	193	156	-	-	-	-	-	-
E.S. CENTRAL	53	30	158	236	196	226	-	2	-	-	2	-
Ky.	2	11	26	28	17	46	-	2	-	-	2	-
Tenn.	27	12	72	87	99	99	-	-	-	-	-	-
Ala.	23	5	52	30	42	25	-	-	-	-	-	-
Miss.	1	2	8	91	38	56	-	-	-	-	-	-
W.S. CENTRAL	24	38	591	1,116	333	504	-	1	-	-	1	-
Ark.	-	-	31	86	48	54	-	-	-	-	-	-
La.	3	12	46	44	26	74	-	-	-	-	-	-
Okla.	21	24	81	139	47	65	-	-	-	-	-	-
Tex.	-	2	433	847	212	311	-	1	-	-	1	-
MOUNTAIN	95	73	400	420	271	240	-	-	-	1	1	12
Mont.	-	-	5	2	2	3	-	-	-	-	-	-
Idaho	1	3	36	16	6	4	-	-	-	1	1	-
Wyo.	4	1	16	3	16	-	U	-	U	-	-	-
Colo.	23	14	35	94	55	44	-	-	-	-	-	2
N. Mex.	12	16	13	39	73	74	-	-	-	-	-	-
Ariz.	42	31	219	202	84	80	-	-	-	-	-	-
Utah	6	6	37	30	14	14	-	-	-	-	-	3
Nev.	7	2	39	34	21	21	-	-	-	-	-	7
PACIFIC	52	70	1,009	1,734	550	651	-	24	-	7	31	13
Wash.	1	3	50	144	57	40	-	13	-	2	15	3
Oreg.	15	21	39	116	28	49	-	1	-	-	1	-
Calif.	32	26	908	1,453	459	551	-	8	-	4	12	7
Alaska	3	2	12	10	4	4	-	-	-	-	-	1
Hawaii	1	18	-	11	2	7	-	2	-	1	3	2
Guam	-	1	-	1	-	9	U	-	U	-	-	-
P.R.	1	3	52	159	93	130	U	-	U	-	-	2
V.I.	-	-	-	-	-	-	U	-	U	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	19	U	-	-	-	-	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

*For imported measles, cases include only those resulting from importation from other countries.

† Of 148 cases among children aged <5 years, serotype was reported for 66, and of those, 10 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 23, 2001, and June 24, 2000 (25th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000
UNITED STATES	1,250	1,260	-	82	190	42	2,047	2,668	-	11	72
NEW ENGLAND	76	72	-	-	2	6	228	732	-	-	10
Maine	1	5	-	-	-	-	-	14	-	-	-
N.H.	9	7	-	-	-	2	21	62	-	-	1
Vt.	4	2	-	-	-	-	22	148	-	-	-
Mass.	43	43	-	-	-	1	169	471	-	-	8
R.I.	2	5	-	-	1	1	2	8	-	-	-
Conn.	17	10	-	-	1	2	14	29	-	-	1
MID. ATLANTIC	101	136	-	5	12	-	140	237	-	4	7
Upstate N.Y.	41	36	-	1	5	-	100	124	-	1	1
N.Y. City	23	28	-	4	4	-	23	39	-	2	6
N.J.	29	24	-	-	-	-	8	-	-	1	-
Pa.	8	48	-	-	3	-	9	74	-	-	-
E.N. CENTRAL	159	219	-	9	17	1	240	299	-	3	-
Ohio	57	45	-	1	7	1	146	161	-	-	-
Ind.	26	24	-	1	-	-	20	27	-	1	-
Ill.	20	58	-	6	5	-	26	23	-	2	-
Mich.	29	71	-	1	4	-	24	31	-	-	-
Wis.	27	21	-	-	1	-	24	57	-	-	-
W.N. CENTRAL	90	84	-	6	10	7	109	124	-	2	1
Minn.	13	7	-	2	-	-	31	59	-	-	-
Iowa	20	19	-	-	5	4	15	17	-	1	-
Mo.	31	42	-	-	2	3	45	24	-	-	-
N. Dak.	5	2	-	-	-	-	-	1	-	-	-
S. Dak.	4	5	-	-	-	-	3	3	-	-	-
Nebr.	8	4	-	1	1	-	2	3	-	-	1
Kans.	9	5	-	3	2	-	13	17	-	1	-
S. ATLANTIC	231	175	-	17	28	3	107	187	-	1	31
Del.	-	-	-	-	-	-	-	4	-	-	-
Md.	29	17	-	4	6	1	15	47	-	-	-
D.C.	-	-	-	-	-	-	1	1	-	-	-
Va.	25	29	-	2	5	-	12	20	-	-	-
W. Va.	6	8	-	-	-	-	1	-	-	-	-
N.C.	50	29	-	1	3	-	39	49	-	-	23
S.C.	22	15	-	1	9	-	19	17	-	-	6
Ga.	32	32	-	7	2	-	6	20	-	-	-
Fla.	67	45	-	2	3	2	14	29	-	1	2
E.S. CENTRAL	83	89	-	2	4	2	43	51	-	-	4
Ky.	14	17	-	1	-	-	11	28	-	-	1
Tenn.	32	38	-	-	2	1	18	11	-	-	-
Ala.	29	25	-	-	2	1	11	9	-	-	3
Miss.	8	9	-	1	-	-	3	3	-	-	-
W.S. CENTRAL	160	142	-	6	21	1	108	123	-	-	6
Ark.	10	7	-	1	1	-	4	12	-	-	1
La.	52	34	-	2	4	-	2	7	-	-	1
Okla.	18	21	-	-	-	-	1	9	-	-	-
Tex.	80	80	-	3	16	1	101	95	-	-	4
MOUNTAIN	70	59	-	7	13	6	865	367	-	-	1
Mont.	2	1	-	-	1	2	8	8	-	-	-
Idaho	6	6	-	-	-	1	162	41	-	-	-
Wyo.	5	-	U	1	1	U	1	1	U	-	-
Colo.	25	19	-	1	-	-	151	207	-	-	1
N. Mex.	10	6	-	2	1	2	57	60	-	-	-
Ariz.	11	18	-	1	3	-	455	34	-	-	-
Utah	7	6	-	1	4	1	22	10	-	-	-
Nev.	4	3	-	1	3	-	9	6	-	-	-
PACIFIC	280	284	-	30	83	16	207	548	-	1	12
Wash.	41	29	-	1	2	10	66	185	-	-	7
Oreg.	20	32	N	N	N	6	19	46	-	-	-
Calif.	215	211	-	23	64	-	117	284	-	-	5
Alaska	2	4	-	1	7	-	1	11	-	-	-
Hawaii	2	8	-	5	10	-	4	22	-	1	-
Guam	-	-	U	-	7	U	-	3	U	-	1
P.R.	3	6	U	-	-	U	2	3	U	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	-	U	-	-	U	-	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

TABLE IV. Deaths in 122 U.S. cities,* week ending June 23, 2001 (25th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	65	45-64	25-44	1-24	<1	
NEW ENGLAND	611	427	112	39	17	15	57
Boston, Mass.	138	86	31	13	3	5	9
Bridgeport, Conn.	47	32	8	4	1	2	1
Cambridge, Mass.	7	4	3	-	-	-	-
Fall River, Mass.	35	30	4	-	1	-	4
Hartford, Conn.	56	33	13	5	2	2	3
Lowell, Mass.	23	19	4	-	-	-	1
Lynn, Mass.	13	6	6	1	-	-	3
New Bedford, Mass.	25	20	3	2	-	-	2
New Haven, Conn.	50	38	5	4	3	-	7
Providence, R.I.	76	50	14	4	3	5	11
Somerville, Mass.	4	3	1	-	-	-	-
Springfield, Mass.	51	40	4	3	3	1	4
Waterbury, Conn.	23	16	6	1	-	-	3
Worcester, Mass.	63	50	10	2	1	-	9
MID. ATLANTIC	2,279	1,619	446	138	40	36	112
Albany, N.Y.	42	30	8	1	2	1	6
Allentown, Pa.	18	18	-	-	-	-	-
Buffalo, N.Y.	82	58	19	3	1	1	7
Camden, N.J.	34	16	9	3	2	4	1
Elizabeth, N.J.	15	12	3	-	-	-	-
Erie, Pa.§	35	27	4	2	1	1	-
Jersey City, N.J.	46	33	10	2	-	1	-
New York City, N.Y.	1,127	782	236	78	19	11	40
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	20	11	5	4	-	-	4
Philadelphia, Pa.	423	305	80	23	7	8	23
Pittsburgh, Pa.§	34	24	8	1	1	-	2
Reading, Pa.	36	32	3	-	-	1	1
Rochester, N.Y.	126	93	20	8	5	-	6
Schenectady, N.Y.	28	22	6	-	-	-	1
Scranton, Pa.§	25	19	4	2	-	-	2
Syracuse, N.Y.	131	102	20	4	1	4	16
Trenton, N.J.	31	15	6	6	1	3	1
Utica, N.Y.	26	20	5	1	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,722	1,207	337	98	47	32	105
Akron, Ohio	58	40	12	4	1	1	1
Canton, Ohio	39	30	9	-	-	-	4
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	90	66	16	5	2	1	8
Cleveland, Ohio	145	93	31	10	4	7	6
Columbus, Ohio	208	142	44	11	10	1	11
Dayton, Ohio	127	93	28	4	1	1	10
Detroit, Mich.	183	115	51	8	5	4	12
Evansville, Ind.	36	28	7	1	-	-	2
Fort Wayne, Ind.	71	53	12	3	2	1	3
Gary, Ind.	17	10	4	-	1	2	-
Grand Rapids, Mich.	66	48	9	5	2	2	7
Indianapolis, Ind.	164	119	22	12	7	4	9
Lansing, Mich.	57	47	5	4	1	-	4
Milwaukee, Wis.	140	92	32	11	4	1	10
Peoria, Ill.	48	38	6	2	1	1	2
Rockford, Ill.	50	32	12	3	1	2	3
South Bend, Ind.	47	32	10	5	-	-	2
Toledo, Ohio	92	65	15	8	2	2	8
Youngstown, Ohio	84	64	12	3	3	2	3
W.N. CENTRAL	835	592	141	63	27	12	50
Des Moines, Iowa	63	54	8	-	-	1	7
Duluth, Minn.	39	36	2	-	-	1	-
Kansas City, Kans.	37	26	9	1	1	-	1
Kansas City, Mo.	102	70	17	8	5	2	7
Lincoln, Nebr.	41	30	6	3	2	-	2
Minneapolis, Minn.	191	138	23	20	9	1	13
Omaha, Nebr.	84	51	21	9	3	-	9
St. Louis, Mo.	122	73	29	12	4	4	3
St. Paul, Minn.	87	64	16	5	-	2	3
Wichita, Kans.	69	50	10	5	3	1	5
S. ATLANTIC	1,343	873	275	117	43	35	71
Atlanta, Ga.	147	84	36	17	7	3	4
Baltimore, Md.	168	103	38	17	6	4	21
Charlotte, N.C.	95	68	13	8	5	1	9
Jacksonville, Fla.	160	105	36	9	7	3	6
Miami, Fla.	147	95	33	15	2	2	10
Norfolk, Va.	72	46	11	6	5	4	2
Richmond, Va.	56	39	14	3	-	-	3
Savannah, Ga.	49	36	5	4	1	3	2
St. Petersburg, Fla.	65	48	9	3	2	3	3
Tampa, Fla.	168	117	29	15	2	5	10
Washington, D.C.	201	117	51	20	6	7	1
Wilmington, Del.	15	15	-	-	-	-	-
E.S. CENTRAL	812	565	149	58	17	22	63
Birmingham, Ala.	193	149	25	8	5	5	18
Chattanooga, Tenn.	58	40	13	3	-	2	4
Knoxville, Tenn.	101	77	15	7	1	1	2
Lexington, Ky.	46	26	15	2	2	1	5
Memphis, Tenn.	162	104	31	19	4	4	11
Mobile, Ala.	69	50	13	5	1	-	3
Montgomery, Ala.	49	33	12	2	-	2	11
Nashville, Tenn.	134	86	25	12	4	7	9
W.S. CENTRAL	1,521	953	321	149	60	38	87
Austin, Tex.	64	43	13	6	-	2	5
Baton Rouge, La.	91	65	16	9	1	-	3
Corpus Christi, Tex.	43	32	9	1	1	-	3
Dallas, Tex.	196	117	44	23	8	4	8
El Paso, Tex.	80	49	20	8	3	-	8
Ft. Worth, Tex.	99	70	15	7	1	6	6
Houston, Tex.	346	177	79	47	34	9	17
Little Rock, Ark.	81	55	16	7	1	2	1
New Orleans, La.	78	52	15	11	-	-	6
San Antonio, Tex.	227	143	46	20	8	10	14
Shreveport, La.	79	54	15	6	2	2	6
Tulsa, Okla.	137	96	33	4	1	3	10
MOUNTAIN	962	657	184	78	27	16	62
Albuquerque, N.M.	149	97	33	15	3	1	6
Boise, Idaho	47	37	7	1	1	1	6
Colo. Springs, Colo.	67	44	11	9	3	-	1
Denver, Colo.	117	73	26	12	4	2	16
Las Vegas, Nev.	158	111	35	9	1	2	5
Ogden, Utah	29	26	2	1	-	-	4
Phoenix, Ariz.	158	102	30	11	9	6	16
Pueblo, Colo.	26	18	4	2	1	1	-
Salt Lake City, Utah	96	67	16	10	2	1	5
Tucson, Ariz.	115	82	20	8	3	2	3
PACIFIC	1,704	1,235	310	94	36	24	158
Berkeley, Calif.	16	10	4	1	-	1	-
Fresno, Calif.	59	47	4	5	3	-	1
Glendale, Calif.	21	16	5	-	-	-	1
Honolulu, Hawaii	77	56	14	5	1	1	8
Long Beach, Calif.	64	42	12	5	1	4	8
Los Angeles, Calif.	432	303	85	26	11	7	41
Pasadena, Calif.	28	20	5	2	-	1	3
Portland, Oreg.	177	128	33	8	5	3	13
Sacramento, Calif.	209	148	44	8	5	4	25
San Diego, Calif.	173	135	27	9	-	-	22
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	173	125	32	11	4	1	10
Santa Cruz, Calif.	25	19	5	1	-	-	4
Seattle, Wash.	103	65	24	7	6	1	5
Spokane, Wash.	57	50	5	1	-	1	8
Tacoma, Wash.	90	71	11	5	-	-	9
TOTAL	11,789¶	8,128	2,275	835	314	229	765

U: Unavailable. -:No reported cases.
*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
†Pneumonia and influenza.
§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.

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